

Debuccalization in Icelandic: the spread and nature of a new phonological variant

Eva Hrund Sigurjónsdóttir, MA student <u>ehs20@hi.is</u> 9.11.2023



Today's talk

- Introduction to *höggmæli*, a debuccalization phenomenon in Icelandic
 - Description based on Sigurjónsdóttir's BA thesis (2021)
 - Distribution in RÍN in the 80s
- Research questions and hypotheses
 - Its current distribution in regards to age and geographical regions
 - Its connection to *n-framburður*; a deletion of /rt/
- Results and discussions
- Conclusions

Introduction to höggmæli



- Unasperated plosives in coda position are replaced with a glottal stop when preceding a nasal
 - Barn: [partn] → [par?n]/[pa?n]
 - Vagnar: [vaknar] → [va?nar] (wagons)
 - Hefna: $[h \in pna] \rightarrow [h \in ?na]$ (to revenge)
- Liquids may cause the same effect, but this is not as common (Árnason, 2018)
 - Varla: $[vartla] \rightarrow [var?la]/[va?la]$ (hardly)
 - Regla: $[regla] \rightarrow [rela]$ (rule)
- Speakers with *höggmæli* may also have a tendency of pre-glottalization in the same environment (Sigurjónsdóttir, 2021, see also Árnason, 2005:157).
 - Barn: [par[?]tn]
 - Varla: [var[?]tla]

Debuccalization



- Debuccalization: a weakening phenomenon where consonants are reduced to laryngeals (O'Brien, 2020), a deletion of oral articulatory features
 - Cockney English: voiceless stops \rightarrow ? intervocalically and before /n m l/
 - Waterbottle \rightarrow [wo.?ə.bp.?əw]
 - Liverpool English (Scouse): $t \rightarrow h$ after short, unstressed vowels
 - It, what, not \rightarrow [ϵ h], [ð ϵ h], [n \circ h]
 - Ukrainian: $\boldsymbol{\gamma} \to \boldsymbol{h}$ in onset position
 - гітара (gitara) → [ĥiˈtara]
- Pre-glottalization is a strengthening phenomenon, while debuccalization is a weakening phenomenon. Both of which however seem to combine into *höggmæli*.

Sigurjónsdóttir's BA thesis



- Aimed to describe the nature and behaviour of phenomenon
- Different plosives have different tendencies to debuccalize
 - /t/ by far the most likely
 - /p/ and /k/ were quite similar
- Speakers will most often switch between oral stops and glottal stops
 - None of the speakers scored 100%
 - Each individual therefore has their own tendency of debuccalizing plosives (as described by Árnason (2005:418))
- Primary stress did not seem to be mandatory for debuccalization to appear
 - Fyrirspurn would debuccalize just as much as Árnagarður: ['fɪrɪ spy?n]; ['au?na karðyr]

Deletion of /rt/



- A dialectal feature, often called *n-framburður*, involves the deletion of /r/ and the epenthesis /t/ in the morphological endings *-arnir*, *-urnar*, *-irnar*
 - Strákarnir [strauːkartnɪr] → [strauːkanɪr] (the boys)
 - Stelpurnar $[stelpyrtnar] \rightarrow [stelpynar]$ (the girls)
 - Sólirnar [souːlɪrtnar] → [souːlɪnar] (the suns)
- This feature has been associated with the southern regions of Iceland, but in Guðfinnsson's research it was documented in other various places as well (Árnason, 2005:409)

Deletion of /rt/ in regards to höggmæli



- All speakers with tendencies to debuccalize plosives in Sigurjónsdóttir's study (2021) also had a tendency to delete /rt/
 - Both phenomena involve the weakening of plosives, /rt/ deletion is usually totally unstressed
- The relationship between höggmæli and n-framburður seems to only go one way: speakers with höggmæli will most likely also have n-framburður, but speakers of n-framburður will not necessarily have höggmæli.

Distribution in RÍN



Graph retrieved from Gíslason & Þráinsson (2000)

RQs and hypotheses



- How is *höggmæli* distributed among native Icelandic speakers in regards to age?
 - The numbers in RÍN indicate it should be more common among younger generations
- How is *höggmæli* distributed among native Icelandic speakers in regards to geographical regions?
 - RÍN indicates it to be more common among young people in Reykjavík and the capital region
- Does the distribution seem like age grading or language change?
 - Given that previous studies have shown that the variant is subjective, it should at least not indicate a massive language change in the near future although it could be happening slowly
- How are the relations between *höggmæli* and *n-framburður* (/rt/ deletion), if they are related at all?
 - Based on Sigurjónsdóttir's data (2021), speakers with tendencies to debuccalize will also have a tendancy to delete /rt/ in the endings -irnar, -arnar and -urnar.

Methodology



- Recordings collected in an online survey, conducted by Angantýsson and Friðriksson. All participants read out loud a short story.
- The text contains 15 target words in total for debuccalization, most of which have /t/ preceding /n/, and four target words for /rt/ deletion.
 - Debuccalization before /l/ will not be taken into consideration for now to simplify the analysis process, as well as the text doesn't contain enough target words for it.
- Speakers are given scores from 100-200 for each target word, where 100 means no sign of a variant and 200 means appearance of a variant

Participants



- The current sample of speakers is compiled of 142 speakers
- The goal is to have roughly equal numbers of speakers regarding age and residence (about 20-30 in each age group and geographical group). The final number of total speakers should be around 180-200.
- The youngest age group (16-20 years old) is almost fully analysed
- The numbers in the following discussion **are not the final results**, but they can give an idea of where things are going.

First results: distribution by age (whole country)





Participant age distribution: 87; 7; 23; 20; 5

Comparison to RÍN



Whole country (1980) Whole country (present)

Age group	Debucc. mean	n	Age group	Debucc. mean	
12-20	102.84	87	16-20	113.28	
21-45	100.75	7	21-45	109.43	
46-55	100.74	23	46-55	104.22	
56-70	100.64	20	56-70	100.65	
71+	100.69	5	71+	102.80	

Reykjavík (1980) Reykjavík (present)

Age group	Debucc. mean	n	Age group	Debucc. mean
12-20	108.04	21	16-20	118.10
21-45	101.92	6	21-45	111.00
46-55	101.56	8	46-55	106.25
56-70	100.21	12	56-70	100.00
71+	101.00	1	71+	100.00

- The younger generations are scoring higher in the present study than the youngest group in RÍN (10 points in 40 years)
- The youngest group in RÍN are ca. 55-63 years old today
 - Those groups have very little signs of debuccalization today, indicates age grading instead of language change? Will be answered when more data has been analysed.

Comparison to RÍN



Whole country: RePARC Whole country: RÍN (1980)

n	Age group	Debucc. mean	Age group	Debucc. mean		
87	16-20	113.28	12-20	<mark>102.84</mark>		
7	21-45	109.43	21-45	100.75		
23	46-55	104.22	46-55	100.74		
20	56-70	<mark>100.65</mark>	56-70	100.64		
5	71+	102.80	71+	100.69		

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Reykjavík: RÍN (1980)

n	Age group	Debucc. mean	Age group	Debucc. mean	
21	16-20	118.10	12-20	<mark>108.04</mark>	
6	21-45	111.00	21-45	101.92	
8	46-55	106.25	46-55	101.56	
12	56-70	100.00	56-70	100.21	
1	71+	100.00	71+	101.00	

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Comparison of regions



Capital region			Northern region			South and southeastern reg				
	n	Age group	Debucc. mean	n	Age group	Debucc. mean		n	Age group	Debucc. mean
	21	16-20	118.10	30	16-20	109.53		25	16-20	114.96
	6	21-45	111.00	-	21-45	-		-	21-45	-
	8	46-55	106.25	3	46-55	109.00		9	46-55	100.00
	12	56-70	100.00	3	56-70	100.00		3	56-70	100.00
	1	71+	100.00	2	71+	103.50		1	71+	100.00

- The capital region still scores the highest among the younger generations
- The western region, the west fjords and the east fjords will be left out for now due to lack of analysed data

Höggmæli and deletion of /rt/





Conclusions



- The presence of höggmæli in a speaker's grammar seems to indicate that the presence of /rt/ deletion is more likely, although the relationship does not go both ways
- Höggmæli is more common among younger generations,
 - However, the youngest generation of RÍN does not score as high as adults today
- More data will determine whether the distribution is related to age grading or language change
- *Höggmæli* is still the strongest in the capital region, but the geographical difference might be neutralized
 - Youngest group scores: (CR) 118.10 (NR) 109.53 (SR) 114.96

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